

AMENDMENT

Entry of the following is respectfully requested. Please amend the following.

IN THE CLAIMS

Please amend the claims as follows:

1. (Original) A process chamber airflow system, comprising:
a blower suitable for creating an initial flow of air suitable for circulation in a process chamber;
a plenum capable of receiving the initial flow of air; wherein the plenum is connected to the blower and the process chamber; and
an air diffuser, connected to the plenum, wherein the air diffuser contains a plurality of holes, such that the initial flow of air through the plenum is reduced.
2. (Original) The process chamber airflow system of claim 1, wherein the air diffuser further comprises:
a means for securing the air diffuser to the plenum.
3. (Original) The process chamber airflow system of claim 1, wherein the reduction in airflow is sufficient to cause the initial airflow to be distributed uniformly through the plurality of holes in the air diffuser.
4. (Previously Amended) The process chamber airflow system as claimed in claim 3, wherein the air diffuser eliminates initial airflow turbulence entering the plenum from an air filter.
5. (Original) The process chamber airflow system of claim 1, further comprising a filter disposed between the blower and the plenum.

6. (Previously Amended) The process chamber airflow system as claimed in claim 5, wherein individual holes, included in the plurality of holes, have varying cross-sectional areas.

7. (Previously Amended) The process chamber airflow system of claim 1, wherein the air diffuser is formed of static charge dissipating material.

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8. (Original) The process chamber airflow system of claim 1, wherein the air diffuser's plurality of holes are uniformly distributed throughout the air diffuser.

9. (Previously Amended) The process chamber airflow system of claim 1, wherein the air diffuser is disposed on one side of a generally cubic chamber of a semiconductor production device.

10. (Original) The process chamber airflow system of claim 1, wherein the chamber is suitable for utilization in microchip production.

11. (Canceled)

12. (Original) The process chamber airflow system of claim 1, wherein the plurality of holes range in size from 0.125 inches to 0.5 inches.

13. (Original) An air diffuser for utilization in a process chamber, comprising a means for securing the air diffuser to the process chamber; and a plate with a first side and a second side, connected to the securing means, wherein the plate includes a plurality of holes penetrating the first and the second sides; wherein the plurality of holes are uniformly dispersed throughout the plate; wherein the plurality of holes are sufficient to cause the first side of plate to experience a first pressure and the

second side to experience a pressure lower than the first pressure when the plate is disposed in an airflow.

14. (Original) The air diffuser of claim 13, wherein the plurality of holes has a total cross-sectional area lower than that of an inlet supplying the airflow.

15. (Original) The air diffuser of claim 13, wherein the change in pressure between the first and the second sides of the plate is sufficient to distribute the airflow through the entire plurality of holes.

16. (Canceled)

17. (Previously Amended) The process chamber airflow system as claimed in claim 13, wherein individual holes, included in the plurality of holes, have varying cross-sectional areas.

18. (Previously Amended) The air diffuser of claim 13, wherein the plate is formed of static charge dissipating material.

19. (Previously Amended) The air diffuser of claim 13, wherein the air diffuser diffuses air with a substantially laminar flow.

20. (Original) The air diffuser of claim 13, wherein the plurality of holes range in size from 0.125 inches to 0.5 inches.

21. (Previously Amended) A method of providing substantially laminar airflow in a process chamber, comprising:

generating an initial flow of air with an initial cross-sectional area;

disposing an air diffuser with a plurality of uniformly spaced hole in the airflow, wherein a total cross-sectional area of the plurality of holes is less then the initial cross-sectional area; creating a back-pressure of air due to the reduction in the cross-sectional area through the plurality of holes;

dispersing a portion of the initial airflow uniformly across the air diffuser; and

providing uniform airflow through the plurality of holes included in the air diffuser, to the process chamber.

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22. (Previously added) A process chamber airflow system, comprising:

a blower suitable for creating an initial flow of air suitable for circulation in a process chamber;

a plenum capable of receiving the initial flow of air; wherein the plenum is connected to the blower and the process chamber; and

an air diffuser including a plurality of holes therein connected to the plenum, the cross-sectional area of the air diffuser is greater than the cross-sectional area of the received initial flow of air into the plenum;

wherein the initial air flow into the plenum is greater than the flow of air through the plurality of holes in the air diffuser.

23. (Previously added) The process chamber airflow system of claim 22, wherein the reduction in airflow is sufficient to cause the initial airflow to be distributed uniformly through the plurality of holes in the air diffuser.

24. (Previously Amended) The process chamber airflow system of claim 22, wherein the air diffuser is formed of static charge dissipating material.

25. (Previously Amended) The process chamber airflow system of claim 22, wherein the air diffuser diffuses air, such that contaminate particles are removed from the chamber by the chamber airflow.

26. (New) A semiconductor production device, comprising:
a generally cubic process chamber for producing semiconductors; and
an airflow system mounted generally on a side of the process chamber, said airflow system including:

a blower suitable for creating an initial flow of air suitable for circulation in the process chamber;

a plenum capable of receiving the initial flow of air; wherein the plenum is connected to the blower and the process chamber; and

an air diffuser, connected to the plenum, wherein the air diffuser contains a plurality of holes, such that the initial flow of air through the plenum is reduced,

wherein the initial air flow into the plenum is greater than the flow of air through the plurality of holes in the air diffuser.

27. (New) The semiconductor production device of claim 26, wherein the reduction in airflow is sufficient to cause the initial airflow to be distributed uniformly through the plurality of holes in the air diffuser.

28. (New) The semiconductor production device of claim 27, wherein the air diffuser eliminates initial airflow turbulence entering the plenum from an air filter.

29. (New) The semiconductor production device of claim 26, further comprising a filter disposed between the blower and the plenum.

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30. (New) The semiconductor production device of claim 26, wherein the air diffuser is formed of static charge dissipating material.
